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ABSTRACT

A study was undertaken to confirm previous findings on the relation between teacher performance on the "Teacher Test of Black English" (TTBE), certain teaching behaviors (direct correction, establishing a set, and "directly relevant" teaching), and the achievement of Vernacular Black English speaking students. In addition, the study sought to determine whether workshops about Vernacular Black English would improve teacher performance on the TTBE, their teaching behavior, and pupil achievement. Subjects were 19 teachers and 228 black students. The teachers taught four lessons, two before and two following their assignment to workshops dealing with the TTBE, with successful teaching behaviors, or with pupil cognitive style (the control group). Teacher performance during the lessons was audiotaped and analyzed, while pupil achievement was measured in pretests and posttests. Correlations between the observed teaching behaviors and measures of teaching efficiency indicated some, but not strong, confirmation of previous findings (the positive relation of "directly relevant" teaching to pupil achievement). Positive relation of teacher performance on the TTBE to pupil achievement was also confirmed. Workshop treatment effects on teaching behavior and TTBE performance were moderate; there were no indications of differential effects on pupil achievement. (RL)

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TEACHER WORKSHOPS, BLACK ENGLISH TEST FOR TEACHERS, AND
SELECTED TEACHING BEHAVIORS AND THEIR RELATION TO PUPIL ACHIEVEMENT

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Abstract

The purpose of this study was to determine: (1) whether previous findings concerning the relation of teachers' performance on a Black English Test for Teachers (TTBE) and certain teaching behaviors (Direct Correction, Establishment of set, "directly relevant" teaching) to Vernacular Black English speaking pupils' achievement in language arts would be confirmed; (2) whether teachers' performance on the TTBE and teaching behaviors would be changed by workshop interventions; and (3) whether the workshop interventions would have a demonstrable effect on pupil achievement.

The subjects of the study were 19 teachers and their 228 vernacular Black English speaking pupils. Based on an analysis of teaching behaviors demonstrated in two videotaped lessons and scores achieved on the TTBE, teachers were assigned to 3 types of treatment: Treatment 1 dealt with the TTBE; Treatment 2 presented an analysis of transcripts illustrating successful teaching behaviors; and Treatment 3 was meant to serve as a control and dealt with discussions of pupil cognitive style.

After the workshops, the teachers were retested on TTBE and asked to teach the two lessons. Teaching performance during these lessons was then audiotaped and analyzed with the help of the same time interval based instrument that had been used for analysis of preworkshop teaching behaviors.

Pupils taking part in the experiment were taught 4 lessons: 2 pre- and 2 postworkshop lessons. The preworkshop lessons dealt with the digraphs ou, oo, and the use of negation. The postworkshop lessons concerned the digraphs ie, ea and the formation of the past tense. Pupil achievement was measured through a posttest adjusted over a comparable pretest. Class means of adjusted posttest scores were used as measure of teaching efficiency displayed during the lessons.

Correlations between the observed Teaching Behaviors and measures of teaching efficiency indicated some, but not strong, confirmation of previous findings (e.g., positive relation of directly relevant behaviors to pupil achievement). Positive relation of teacher performance on TTBE to pupil achievement was also confirmed for the two lessons directly dealing with problems related to Vernacular Black English Grammar (Negation, Past tense).

Workshop treatment effects on teaching behavior and TTBE performance were moderate. The only significant treatment effects were again in one section of the TTBE in Treatment Group 1 and a decrease of "undesirable" teaching behaviors (indirect correction) in Treatment Group 2.

In order to investigate the impact of treatment on pupil achievement, the adjusted class mean scores of the postworkshop lessons were subjected to an analysis of variance as well as a non-parametric test of significance of differences of rank orders with treatments as independent variables. Neither of these procedures gave any indication of differential effects related to the three treatment interventions.

Contents

Introduction	1
General Procedures	1
Subjects	3
Relation of Black English Test and Teaching Behaviors to Pupil Achievement	4
a. The Independent Variables: Black English Test and Teaching Behaviors	4
b. Dependent Variables: Pupil Tests	8
c. Relation of Independent to Dependent Variables	14
Workshop Effects	19
a. Assignment to Workshops	19
b. Independent Variables: The Teacher Workshop Training	21
c. Training Effects on TTBE	24
d. Training Effects on Behaviors	24
e. Training Effects on Pupil Achievement	29
Summary and Conclusions	35
Appendix A: Definition and Examples of Teaching Behaviors	
Appendix B: Sample of Pupil Achievement Test (Posttest: Unit II, Lessons 3 and 4)	
Appendix C: Description of Workshop Treatments	
References	

TEACHER WORKSHOPS, BLACK ENGLISH TEST FOR TEACHERS, AND
SELECTED TEACHING BEHAVIORS AND THEIR RELATION TO PUPIL ACHIEVEMENT

Robert L. Politzer and Shirley A. Lewis

Introduction

The research presented in this report forms the third and last phase of a general research and development plan. The goal of the first phase of the plan was the development of reliable and valid tests dealing with the history and structure of Black English and with the knowledge of teaching methods suited to bidialectal classrooms (Politzer and Hoover, 1977). The second phase of the plan dealt with the observation and identification of teaching skills associated with improvement of Black English speaking pupils' achievements in reading and language (Politzer and Lewis, 1978). The third phase, with which this report is concerned, deals with an experiment that had two main purposes: (a) to validate the findings of Phases One and Two concerning the relation of teacher achievement in the Black English test (TTBE) and selected teaching behaviors to pupil achievement; and (b) to investigate whether the teaching of knowledge implied in the TTBE and of selected teaching procedures in teacher workshops would lead to the increased language arts and reading achievements of Black English speaking pupils.

General Procedures

The research reported here was carried out in the Vallejo Unified School District, Vallejo, California, a school district that had not been

involved in Phases One and Two of this research effort. The research efforts involved the following steps which are outlined below in an approximate chronological order (some of the steps overlapped to some extent).

a. Identification of nineteen third grade teachers who were willing to take part in the experiment.

b. Development of two curriculum units consisting of two sections each and compatible with the syllabus of instruction planned in the Vallejo Unified School District. The curriculum units were partly based on those that had been used in the previous research dealing with identification of successful teaching behaviors (Politzer and Lewis, 1978). The first unit consisted of two lessons: Lesson 1 dealt with ou and oo digraphs and Lesson 2 with identification and use of correct standard English negation. The second unit consisted also of two lessons: Lesson 3 dealt with the digraphs ie and ea, while Lesson 4 was concerned with identification and use of the past tense.

c. Development of four tests (two forms each) corresponding to the two curriculum units (Lessons 1, 2, 3, and 4) mentioned above.

d. Administration of the Black English teachers' test (TTBE) to participating teachers.

e. Pretesting of pupils on tests dealing with the first curriculum unit (Lessons 1 and 2).

f. Videotaping of participating teachers while teaching Lessons 1 and 2. (Each videotaped lesson lasted approximately twenty minutes).

g. Posttesting of pupils on tests dealing with Lessons 1 and 2.

h. Scoring of teachers' TTBE test and analysis of their videotaped

teaching of Lessons 1 and 2 according to an instrument based on the teaching behaviors found to be related to pupil achievement in previous research. Assignment of teachers to workshop treatment groups on the basis of TTBE scores and teaching behaviors in Lessons 1 and 2.

i. Organization of workshops in which participating teachers are assigned to three treatment conditions: Treatment 1 dealt with knowledge represented in the TTBE; Treatment 2 illustrated and discussed the behaviors related to pupil achievement; and Treatment 3 -- which was essentially meant to be a "control group" treatment -- simply presented some general information concerning different types of cognitive styles (primarily based on Ramírez and Castañeda, 1974).

j. Pretesting of pupils on tests dealing with Lessons 3 and 4.

k. Videotaping of participating teachers while teaching lessons 3 and 4.

l. Posttesting of pupils on Lessons 3 and 4. (Each videotaped lesson lasted approximately twenty minutes).

m. Posttesting of teachers on TTBE.

n. Analysis of teaching behaviors demonstrated in Lessons 3 and 4.

o. Debriefing of participating teachers and informing them of preliminary results. Acquainting teachers with the main principles involved in the other two treatments which they had not received in the treatment group to which they had been assigned.

Subjects

The experiment involved 19 teachers and their 228 pupils, most of whom were speakers of vernacular Black English. Since the second phase

of the research had not identified achievement related teaching behaviors specifically concerned with the treatment of Black English Vernacular (BEV), no attempt was made to ascertain the exact degree of BEV dominance of the pupils involved in the experiment. In addition, the testing involved in determining relative vernacular Black English dominance would not have been possible within the time limits allotted to the experiment by the participants. As can be seen from Table 1, of the 19 teachers (coded 30 to 48) taking part in the experiment, 17 were female, 5 were black, 13 were white, and 1 was Asian-American.

Relation of Black English Tests and Teaching Behaviors
to Pupil Achievement

- a. The Independent Variables: Black English Tests and Teaching Behaviors.

The Black English test for teachers utilized in this experiment consists of two sections. Section I (History and Structure) dealt with such topics as the possible sources of Black English and the specific features of Black English phonology, morphology and syntax, as well as speech events, such as "marking" or "copping a plea." Section II (Reading Pedagogy) is made up primarily of items probing awareness of possible uses of the Black vernacular in the classroom. The reliability of the tests had been established in previous administrations and ranged from Cronbach $\alpha = 0.91$ to $\alpha = 0.70$ for Section I and $\alpha = 0.85$ to $\alpha = 0.63$ for Section II (Politzer and Hoover, 1977; Politzer and Lewis, 1978). In this experiment, a 45-item version of Section I and a 21-item version of

TABLE 1

Summary of Subject Data

Teacher Number	Sex	Race	Number of Students, Unit I	Number of Students, Unit II
30	F	Caucasian	7	10
31	F	Asian-American	9	9
32	F	Black	10	7
33	F	Black	17	11
34	F	Caucasian	9	6
35	F	Black	10	10
36	F	Caucasian	9	8
37	F	Caucasian	28	18
38	F	Black	12	12
39	F	Caucasian	11	10
40	M	Caucasian	12	12
41	F	Caucasian	20	19
42	F	Caucasian	12	22
43	M	Caucasian	10	13
44	F	Caucasian	8	4
45	F	Black	13	14
46	F	Caucasian	8	9
47	F	Caucasian	10	9
48	F	Caucasian	<u>13</u>	<u>9</u>
Total			228	Total 212

Section II were used as pre- and posttests. Pretests were administered to participating teachers before they taught Lessons 1 and 2; posttest were administered after the workshops and before the teaching of Lessons 3 and 4. Reliability of the tests was rechecked in the administration of the posttests and found to be Cronbach's $\alpha = 0.79$ for Section I and $\alpha = 0.69$ for Section II of the test. Individual teacher scores on both sections of the tests as well as on the total tests are shown in Table 2.

The instrument for the observations on teaching behaviors was based on the results of previous research carried out by the authors (Politzer and Lewis, 1978). This research had used two observation instruments. One was based on the counting of frequencies of utterances devoted to certain types of classroom behaviors, such as establishing set, explaining, correcting, etc. The other was based on a time interval recording system and the observation of broader types of behavior categories: errors and/or confusions in the presentation of materials, teaching acts only indirectly related to the goal of the lesson, and teaching acts directly related to the goal of the lesson. The behaviors included in the second rather than the first instrument had shown some significant relation to pupil achievements. Teachers devoting less time to indirectly relevant activities and avoiding error/confusion behaviors were found to be more successful. The instrument used in this study was a modification of the second instrument mentioned. It was a time interval based instrument in which observers recorded activities taking place at every ten-second interval. The categories of Error/Confusion, Directly Relevant, and Indirectly Relevant were retained. Added to them, however, were three categories taken from the first instrument because they had shown some

TABLE 2

Scores in Black English Test for Teachers

Teacher No.	Pretest			Posttest		
	Section I (45 items)	Section II (21 items)	Total (66 items)	Section I (45 items)	Section II (21 items)	Total (66 items)
30	31	19	50	40	21	61
31	32	18	50	41	20	61
32	31	12	43	38	15	53
33	32	15	47	40	19	59
34	31	21	52	44	21	65
35	36	18	54	34	16	50
36	34	16	40	38	18	56
37	29	20	49	38	20	58
38	29	16	45	31	15	46
39	31	19	50	32	19	51
40	30	17	47	34	15	49
41	30	17	47	39	16	55
42	33	18	51	NO DATA		
43	28	16	44	32	19	51
44	32	18	50	35	20	55
45	31	11	42	25	11	36
46	26	14	40	29	13	42
47	32	17	49	39	18	57
48	33	19	52	31	21	52

significant relation to pupil achievement: Establishment of Set, Direct Correction of Errors, and Indirect Correction of Errors. Full definitions and examples of the six behaviors observed are found in Appendix A. Rater reliability for the six categories included on the instruments was obtained by computing the percentage agreement of two independent raters in five observed lessons of approximately twenty minutes each. Percentage agreements were computed for each of the lessons, converted to ratio z-scores, averaged, and reconverted to ratio percentages. The averaged percentage agreements, all of them extremely high, are shown in Table 3.

Since not all of the videotaped lessons took exactly twenty minutes, the observed frequencies of each behavior were prorated according to the formula:

$$\frac{\text{observed frequencies}}{\text{observation time}} = \frac{x}{\text{twenty minutes}}$$

Tables 4a and 4b show the prorated frequencies of the six observed behaviors for individual teachers during the four lessons taught, as well as during all of Units I and II. Mean frequencies of behaviors for Units I and II are also shown at the bottom of the tables. Quite expectedly, the Directly Relevant category heavily dominates the others. Establishing Set, an activity which, if present at all, was confined to the beginning of the lesson, is the least frequent of the six behaviors during both units.

b. Dependent Variables: Pupil Tests.

For each of the four lessons taught in the experiment, specific pupils' pre- and posttests were constructed. Pre- and posttests for the

TABLE 3

Interobserver Agreement for Observed Behaviors

Behavior	Agreement Score
Establish Set	99.5%
Direct Correct	98.5%
Indirect Correct	98.0%
Error/Confusion	98.0%
Directly Relevant	98.0%
Indirectly Relevant	98.5%

TABLE 4a

Prorated Frequency of Classroom Behaviors - Unit I

Teacher No.	Lesson	Establish Set	Direct Correct	In-direct Correct	Error/Confusion	Directly Relevant	In-directly Relevant
30	1	3.75	3.75	5.00	10.00	98.75	2.50
	2	1.67	1.67	0.00	25.00	58.33	35.00
	Unit I	5.42	5.42	5.00	35.00	157.08	37.50
31	1	5.71	5.71	17.14	0.00	52.86	44.29
	2	1.05	2.11	10.53	13.68	120.00	0.00
	Unit I	6.77	7.82	27.67	13.68	172.86	44.29
32	1	12.50	0.00	2.50	0.00	25.00	70.00
	2	0.00	0.00	5.71	14.29	105.71	14.29
	Unit I	12.50	0.00	8.21	14.29	130.71	84.29
33	1	0.00	8.00	11.00	0.00	51.00	23.00
	2	2.00	2.00	11.00	2.00	114.00	0.00
	Unit I	2.00	10.00	22.00	2.00	165.00	23.00
34	1	4.00	5.00	0.00	0.00	101.00	7.00
	2	0.00	1.18	12.94	5.88	100.00	12.94
	Unit I	4.00	6.18	12.94	5.88	201.00	19.94
35	1	1.00	36.00	8.00	1.00	113.00	3.00
	2	4.00	7.00	17.00	20.00	74.00	32.00
	Unit I	5.00	43.00	25.00	21.00	187.00	35.00
36	1	1.05	20.00	1.05	4.21	109.47	6.32
	2	1.54	4.62	16.92	16.92	106.15	3.08
	Unit I	2.59	24.62	17.98	21.13	215.63	9.39
37	1	0.00	10.00	0.00	0.00	112.00	0.00
	2	2.22	0.00	0.00	0.00	84.44	0.00
	Unit 1	2.22	10.00	0.00	0.00	196.44	0.00
38	1	2.00	1.00	4.00	0.00	92.00	17.00
	2	10.00	1.00	1.00	2.00	107.00	8.00
	Unit 1	12.00	2.00	5.00	2.00	199.00	25.00
39	1	0.00	7.00	12.00	8.00	94.00	6.00
	2	0.00	0.00	0.00	5.33	113.33	0.00
	Unit 1	0.00	7.00	12.00	13.33	207.33	6.00

TABLE 4a (Cont'd.)

Teacher No.	Lesson	Establish Set	Direct Correct	In- direct Correct	Error/ Confu- sion	Directly Relevant	In- directly Relevant
40	1	1.11	2.22	10.00	16.67	93.33	0.00
	2	0.00	0.00	7.78	23.33	61.11	25.56
	Unit I	1.11	2.22	17.78	40.00	154.44	25.56
41	1	2.00	1.00	23.00	5.00	101.00	7.00
	2	0.00	5.00	0.00	26.00	94.00	23.00
	Unit I	2.00	6.00	23.00	31.00	195.00	30.00
42	1	2.67	6.67	1.33	0.00	104.00	46.67
	2	1.00	0.00	0.00	63.00	72.00	45.00
	Unit I	3.67	6.67	1.33	63.00	176.00	91.67
43	1	2.22	0.00	13.33	7.78	68.89	33.33
	2	3.75	0.00	10.00	37.50	66.25	21.25
	Unit I	5.97	0.00	23.33	45.28	135.14	64.58
44	1	0.00	9.41	1.18	29.41	87.06	21.18
	2	1.82	16.36	9.07	7.27	109.09	0.00
	Unit I	1.82	25.79	10.27	36.68	196.15	21.18
45	1	0.00	1.11	7.78	17.78	197.78	0.00
	2	0.00	0.00	15.71	74.29	108.57	5.71
	Unit I	0.00	1.11	23.49	92.06	216.35	5.71
46	1	6.67	8.33	6.67	1.67	80.00	16.67
	2	2.00	0.00	0.00	46.00	48.00	18.00
	Unit I	8.67	8.33	6.67	47.67	128.00	34.67
47	1	2.86	0.00	1.43	2.86	88.57	15.71
	2	6.67	2.22	0.00	0.00	102.22	2.22
	Unit I	9.52	2.22	1.43	2.86	190.79	17.94
48	1	13.00	13.00	7.00	0.00	102.00	8.00
	2	1.67	1.67	20.00	96.67	31.67	80.00
	Unit I	14.67	14.67	27.00	96.67	133.67	88.00
Mean Unit I		4.00	8.47	11.84	23.47	145.16	25.84

TABLE 4b

Prorated Frequency of Classroom Behaviors - Unit II

Teacher No.	Lesson	Establish Set	Direct Correct	In-direct Correct	Error/Confusion	Directly Relevant	In-directly Relevant
30	3	2.86	5.71	2.86	42.86	102.86	5.71
	4		DATA	NOT AVAILABLE			
	Unit II		DATA	NOT AVAILABLE			
31	3	0.00	2.00	5.00	19.00	95.00	21.00
	4	0.00	1.00	8.00	11.00	108.00	1.00
	Unit II	0.00	3.00	13.00	30.00	203.00	22.00
32	3	6.67	3.33	3.33	66.67	120.00	0.00
	4	2.22	4.44	2.22	35.56	120.00	0.00
	Unit II	8.99	7.78	5.56	102.22	240.00	0.00
33	3	0.00	5.00	8.00	3.00	76.00	32.00
	4	1.00	3.00	9.00	50.00	97.00	18.00
	Unit II	1.00	8.00	17.00	53.00	173.00	50.00
34	3	0.00	0.00	0.00	3.00	98.00	9.00
	4	0.00	0.00	0.00	20.00	100.00	15.00
	Unit II	0.00	0.00	0.00	23.00	198.00	24.00
35	3	6.00	6.00	8.00	0.00	94.00	2.00
	4	5.00	4.00	7.00	15.00	77.00	6.00
	Unit II	11.00	10.00	15.00	15.00	171.00	8.00
36	3	0.00	14.00	1.00	1.00	53.00	45.00
	4	0.00	5.33	5.33	2.67	82.67	25.33
	Unit II	0.00	19.33	6.33	3.67	135.67	70.33
37	3	2.35	0.00	0.00	3.35	94.12	0.00
	4		DATA	NOT AVAILABLE			
	Unit II		DATA	NOT AVAILABLE			
38	3	3.00	0.00	0.00	1.00	180.00	11.00
	4	5.56	5.56	5.56	5.56	88.89	31.11
	Unit II	8.56	5.56	5.56	6.56	268.89	42.11
39	3	1.11	1.11	1.11	1.11	75.56	11.11
	4	1.43	4.29	4.29	5.71	104.29	0.00
	Unit II	2.54	5.40	5.40	6.83	179.84	11.11

TABLE 4b (Cont'd.)

Teacher No.	Lesson	Establish Set	Direct Correct	In- direct Correct	Error/ Confu- sion	Directly Relevant	In- directly Relevant
40	3	0.00	9.47	9.47	8.42	101.05	5.26
	4	0.00	1.00	1.00	7.00	90.00	2.00
	Unit II	0.00	10.47	10.47	15.42	191.05	7.26
41	3	1.00	5.00	5.00	0.00	94.00	3.00
	4	1.00	5.00	0.00	9.00	114.00	2.00
	Unit II	2.00	10.00	5.00	9.00	208.00	5.00
42	3	2.11	1.05	6.32	5.26	68.42	27.37
	4	1.00	15.00	5.00	1.00	96.00	24.00
	Unit II	3.11	16.05	11.32	6.26	164.42	51.37
43	3	0.00	5.00	0.00	5.00	115.00	0.00
	4	1.82	5.45	12.73	14.55	114.55	3.64
	Unit II	1.82	10.45	12.73	19.55	229.55	3.64
44	3	0.00	6.00	0.00	4.00	69.00	50.00
	4	0.00	4.00	4.00	24.00	100.00	20.00
	Unit II	0.00	10.00	4.00	28.00	169.00	70.00
45	3	0.00	0.00	10.00	26.00	98.00	14.00
	4	0.00	5.71	5.71	12.86	111.43	8.57
	Unit II	0.00	5.71	15.71	38.86	209.43	22.57
46	3	7.50	12.50	0.00	2.50	107.50	12.50
	4	3.64	0.00	0.00	5.45	103.64	16.36
	Unit II	11.14	12.50	0.00	7.95	211.14	28.86
47	3	1.00	6.00	0.00	6.00	103.00	3.00
	4	1.00	0.00	1.00	7.00	99.00	16.00
	Unit II	2.00	6.00	1.00	13.00	202.00	19.00
48	3	0.00	6.67	4.00	0.00	82.47	18.67
	4	1.05	4.21	12.63	2.11	89.47	20.00
	Unit II	1.05	10.88	16.63	2.11	171.94	38.67
Mean Unit II		1.45	4.40	4.91	13.44	99.76	12.30

same lesson differed in the choice of specific test items, but the content of the tests was generally the same. Test items consisted of multiple choices, completions, and fill-ins; one of the tests (Posttest: Unit II, Lessons 3 and 4) is reproduced in Appendix B.

Table 5 shows the mean scores, standard deviations and reliabilities for all the pupils' tests administered throughout the experiment. Reliabilities (Cronbach's α) range from .77 to .90 for the individual lesson test and .89 to .92 for the combined unit tests. In other words, they are well within the satisfactory range of test reliability.

For the purpose of measuring teaching efficiency related to a particular lesson or unit, posttest scores were adjusted over pretest scores. For the adjustment of an individual pupil's test, pooled regressions of posttest scores over pretest scores were utilized (see Table 6). For each lesson and unit mean, adjusted posttest scores for each class were computed. These adjusted mean posttest scores, reproduced in Tables 7a and 7b, are the dependent measures of teaching efficiency used in the experiment.

c. Relations of Independent to Dependent Variables.

For the purpose of establishing the relation of Teaching Behaviors and TTBE scores to pupil achievement, Pearson correlations were computed. Behaviors shown during each lesson or unit were correlated with the mean adjusted posttest scores for that lesson or unit. Adjusted posttest scores for Unit I (Lessons 1 and 2) were correlated with TTBE pretest scores, while TTBE posttest scores were correlated with the adjusted posttest scores of Unit II (Lessons 3 and 4).

TABLE 5

Means, Standard Deviations and Reliabilities for Curriculum-Specific Tests:
Pre and Posttest Administrations

Lesson	Pupil No.	Pretest				Posttest			
		Max. Score	Mean	S. D.	Cronbach α	Max. Score	Mean	S. D.	Cronbach α
Lesson 1	228	20	16.57	3.99	.88	19	14.90	5.46	.90
Lesson 2	228	22	15.71	4.05	.79	31	16.23	6.07	.84
Unit I	228	42	32.29	7.18	.89	50	40.10	9.23	.92
Lesson 3	212	41	26.04	7.39	.87	42	30.63	6.88	.88
Lesson 4	212	22	12.51	4.31	.77	22	14.24	5.05	.79
Unit II	212	63	38.5	10.43	.90	64	44.87	10.03	.90

TABLE 6

Regression of Posttest over Pretest Scores on
Curriculum-Specific Tests

Test	B	Beta	Error	f-ratio
Lesson 1	.94	.65	.07	162.81
Constant	(7.37)			
Lesson 2	.49	.46	.06	59.93
Constant	(9.52)			
Unit I	.84	.68	.06	198.76
Constant	(12.92)			
Lesson 3	.71	.76	.04	294.11
Constant	(12.15)			
Lesson 4	.76	.65	.06	149.37
Constant	(4.78)			
Unit II	.81	.80	.04	388.82
Constant	(13.48)			

TABLE 7a

Means and Standard Deviations of Adjusted Posttest Scores
on Curriculum-Specific Subtests and Total Tests for
Individual Teachers' Classes: Unit I

Teacher Number	Lesson 1		Lesson 2		Unit I	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
30	18.68	4.66	13.87	5.33	32.99	8.91
31	24.33	4.59	17.57	2.96	42.23	5.73
32	16.72	3.45	14.88	2.68	32.34	3.11
33	20.53	3.57	12.07	4.03	32.24	5.38
34	24.43	1.96	17.33	2.58	41.09	2.54
35	20.64	4.20	18.42	3.12	39.77	5.18
36	14.72	3.87	15.52	3.37	31.32	4.74
37	24.32	4.11	19.61	2.81	44.02	6.20
38	26.10	3.06	17.79	3.17	43.49	2.59
39	23.00	2.01	17.40	1.80	39.56	2.65
40	24.61	2.04	17.54	2.87	41.84	2.61
41	23.65	2.79	19.52	1.88	42.55	3.61
42	25.72	1.28	18.60	3.55	43.43	4.15
43	21.89	4.83	12.89	4.17	35.17	6.42
44	23.44	4.95	19.03	3.86	43.09	6.82
45	23.49	5.67	15.16	5.65	39.52	10.74
46	23.98	3.07	15.68	2.24	39.98	4.20
47	24.83	5.17	19.01	2.58	43.59	2.39
48	26.22	3.06	18.40	3.68	44.64	4.58

TABLE 7b

Means and Standard Deviations of Adjusted Posttest Scores
on Curriculum-Specific Subtests and Total Tests for
Individual Teachers' Classes: Unit II

Teacher Number	Lesson 3		Lesson 4		Unit II	
	Mean	S. D.	Mean	S. D.	Mean	S. D.
30	29.46	2.96	14.12	2.30	43.38	3.99
31	32.16	2.67	17.56	3.81	49.72	3.67
32	25.09	4.75	12.91	3.61	38.38	5.55
33	30.53	4.60	17.35	2.79	46.85	4.89
34	30.99	2.03	14.79	2.37	45.95	1.49
35	30.52	5.32	13.73	2.73	44.90	7.23
36	28.65	3.64	12.62	2.80	42.22	4.66
37	29.69	4.91	15.15	4.87	44.75	8.10
38	35.02	3.76	16.63	3.19	51.27	5.79
39	30.19	3.93	14.32	3.85	43.93	5.56
40	31.28	4.04	14.14	3.99	45.09	6.00
41	31.49	4.13	15.41	2.34	46.34	4.63
42	31.73	5.96	12.90	4.30	45.04	8.58
43	26.56	2.37	9.23	3.40	36.32	3.95
44	32.81	2.68	15.10	5.49	48.38	5.65
45	31.86	3.80	13.14	3.51	45.46	5.18
46	30.30	2.20	12.69	1.87	42.50	2.94
47	31.28	3.15	14.26	3.35	45.03	4.26
48	30.47	4.12	15.89	2.05	47.00	4.19

All the correlations between Teaching Behaviors and TTBE scores on the one hand and pupil achievement scores on the other are shown in Table 8. In general, they indicate a moderate confirmation of previous research findings (Politzer and Hoover, 1977; Politzer and Lewis, 1978). The significant or near-significant correlations are relatively few in number, but they all confirm previous results. Among the behaviors observed, Error and/or Confusion correlates significantly and negatively with achievement in Lesson 4; Directly Relevant Behaviors correlates positively with achievement in Lessons 2 and 3. The TTBE test shows significant or near-significant correlations with achievement in Lesson 2 (Negation) and Lesson 4 (Past Tense), the two "grammar oriented" lessons. However, achievement in the two "spelling oriented" lessons dealing with digraphs appears to have no relation to teachers' performance on TTBE.

Workshop Effects

a. Assignment to Workshops.

The workshops which constituted the attempted intervention phase of the experiment took place between the teaching of Unit I (Lessons 1 and 2) and Unit II (Lessons 3 and 4). Teachers were assigned to three distinct treatment conditions: (1) training in knowledge related to TTBE; (2) training in teaching behaviors; and (3) lecture on pupil's cognitive style (control group). In order to establish approximate pretreatment equality in TTBE knowledge and teaching behaviors between treatment groups, teachers were assigned to treatment groups on the basis described below.

Teaching behavior scores for each of the behaviors observed were

TABLE 8

Correlations of Prorated Frequencies of Classroom Behaviors
and TTBE Scores with Adjusted Posttests

Behavior	Lesson 1	Lesson 2	Unit I	Lesson 3	Lesson 4	Unit II
EST SET	-.03	-.05	.20	-.29	.07	-.25
DIR COR	-.28	.18	.11	-.24	-.28	-.31
IND COR	.11	-.10	-.18	-.12	.22	.30
ERR CON	.00	.01	.16	-.21	-.46*	-.12
DIR REL	.26	.49*	-.14	.43*	.12	.10
IND REL	-.16	-.21	.19	.30	.25	.06
<u>TTBE</u>						
TTBE Section 1	-.11	.36+	.14	-.16	.35+	.05
TTBE Section 2	.07	.45*	.28	-.14	.29	.05
TTBE Total	-.07	.40+	.20	-.15	.34+	.06

* $p < .05$

+ approaching $p < .05$

divided into six intervals in such a way that a rank number of six was assigned to the highest scores in desirable behaviors and the lowest scores in undesirable behaviors. Conversely, a rank number of 1 was given to the lowest frequencies of desirable behaviors and to the highest frequencies of undesirable behaviors. Behaviors assumed to be desirable were, of course, Establishment of Set, Direct Correction, and Directly Relevant Teaching Acts. Undesirable behaviors were Indirect Correction, Error/Confusion, and Indirectly Relevant Teaching. In each of the six behaviors observed, each teacher could thus receive a score from 6 to 1. The scores in the individual behaviors were averaged so that each teacher, on the basis of performance in Unit I, could be assigned an average composite behavior score. These scores were used to assign teachers to High and Low pretreatment behavior groups (scores of 3.8 and above constituting the High group). On the basis of total scores on the TTBE pretest, teachers were also divided into High and Low groups (with scores of 50 and above resulting in assignments to the High achievement group).

On the basis of High (H) or Low (L) achievement in TTBE and teaching behaviors, teachers were then assigned to four groups, namely: H,TTBE/H, Behaviors; H,TTBE/L, Behaviors; L,TTBE/H, Behaviors; L,TTBE/L, Behaviors. Assignments to treatment groups, as shown on Table 9, were then carried out in such a way that the four groups of H and L combinations in behaviors and TTBE were equally distributed among the three treatments.

b. The Independent Variables: The Teacher Workshop Training.

The teacher workshops took place on two consecutive weekends.

TABLE 9

Treatment Group Assignments

Teacher No.	Comparative Behavior Rank	TTBE Rank	Treatment Group
30	L	H	1
31	H	H	3
32	L	L	1
33	H	L	1
34	H	H	1
35	H	H	2
36	H	H	3
37	H	L	1
38	H	L	2
39	H	H	2
40	L	L	2
41	L	L	3
42	L	H	3
43	L	L	1
44	H	H	1
45	L	L	3
46	L	L	2
47	H	L	3
48	L	H	2

Each workshop session lasted approximately two hours. The teachers taking part in the workshops followed one of three different treatments.

Treatment 1 (Black English) consisted of lectures covering the establishment of the concepts of Black vernacular and Black standard English, the origin of Black English in West Africa and colonial America, and the main features of vernacular Black English. The workshop leaders emphasized that vernacular Black English constituted a systematic, logical language variety and that vernacular Black English per se did not constitute an obstacle to achievement in language arts.

Treatment 2 (Teaching Behaviors) consisted of a presentation and discussion of the "successful" and "non-successful" teaching behaviors. The discussion was based primarily on written transcripts of lessons illustrating the behaviors. Teachers were given charts to help them with error-free, clear presentation of lessons dealing with digraphs and the forms of the past tense.

Treatment 3 (Cognitive Styles) aimed to provide teachers with interesting and helpful information without, however, bringing about a specific immediate change in teaching behavior. Lectures given in this workshop explained the concept of cognitive style. The treatment (based primarily on Ramírez and Castañeda, 1974) outlined field-sensitive and field-independent learning and teaching styles, stressed their correlations with different cultural groups, and explained how adaptation of teaching style to cognitive style patterns may lead to improve achievement. (For a more detailed description of Treatments 1, 2, and 3, see Appendix C).

c. Training Effects on TTBE.

Effects of training on achievement on the TTBE test were determined by a simple comparison of pre- and posttest mean scores achieved in the three treatment groups. The results of the comparison are shown in Table 10. They conform, in general, to expectations. In the control group, the posttreatment scores are slightly lower than the pre-treatment scores, perhaps on account of a reaction against having to take twice a test unrelated to the treatment. In the behavior treatment group, there are some, though not significant gains. The only statistically significant gain occurs in Treatment Group 1 and on the section of the test dealing specifically with the structure and history of Black English.

d. Training Effects on Behaviors.

Training effects on teaching behaviors were determined by a comparison of behaviors shown during the teaching of Unit I with those demonstrated while teaching Unit II. T-tests between mean frequencies of behavior during Units I and II were carried out for each of the three treatment groups. The results of the t-tests are summarized in Tables 11a, 11b, and 11c.

In general, treatment effects appear to be comparatively slight and in the expected direction. The only significant results are obtained in Treatment 2, which dealt directly with the observed teaching behaviors. A behavior presumed undesirable, namely Indirect Correction, decreased significantly, though the decrease in Indirect Correction is not accompanied by an increase in Direct Correction. In the same treatment

TABLE 10

Difference between Pre and Posttreatment Means TTBE Scores by
Treatment Groups

Test	N	Mean	S. D.	Difference of Means	t- Value
<u>Treatment Group 1</u>					
Pre TTBE I	7	26.00	11.55	-12.14	-2.52*
Post TTBE I		38.14	4.02		
Pre TTBE II	7	15.14	7.31	-4.00	-1.68
Post TTBE II		19.14	2.12		
Pre TTBE Total	7	41.14	18.44	-16.14	-2.29+
Post TTBE Total		57.29	4.96		
<u>Treatment Group 2</u>					
Pre TTBE I	6	26.33	13.42	-6.67	-1.27
Post TTBE I		33.00	2.00		
Pre TTBE II	6	14.50	7.34	-2.33	-0.83
Post TTBE II		16.83	3.06		
Pre TTBE Total	6	40.83	20.68	-9.00	-1.14
Post TTBE Total		49.83	4.17		
<u>Treatment Group 3</u>					
Pre TTBE I	6	32.00	1.41	1.83	0.28
Post TTBE I		30.17	15.84		
Pre TTBE II	6	16.17	2.64	2.67	0.86
Post TTBE II		13.50	7.18		
Pre TTBE Total	6	48.17	3.31	4.50	0.47
Post TTBE Total		43.67	22.99		

* p < .05

+ approaching p < .05

TABLE 11a

Differences between Pre and Posttreatment Adjusted Behavior

Mean Scores: Treatment Group 1

Behavior	N	Mean	S. D.	Differences of Means	t- Value
EST SET Pre	5	2.40	1.82	0.06	0.77
EST SET Post		2.34	3.74		
DIR COR Pre	5	6.60	7.20	-0.65	-0.18
DIR COR Post		7.25	4.22		
IND COR Pre	5	12.40	8.39	4.54	1.97
IND COR Post		7.86	6.88		
ERR CON Pre	5	15.60	16.18	-29.55	-1.45
ERR CON Post		45.15	34.49		
DIR REL Pre	5	129.10	53.59	-72.51	-2.03
DIR REL Post		201.91	32.21		
IND REL Pre	5	27.80	12.36	-1.73	-0.10
IND REL Post		29.53	30.12		

TABLE 11b

Differences between Pre and Posttreatment Adjusted Behavior

Mean Scores: Treatment Group 2

Behavior	N	Mean	S. D.	Differences of Means	t- Value
EST SET Pre	6	6.17	5.71	0.46	0.15
EST SET Post		5.71	5.10		
DIR COR Pre	6	12.17	15.74	3.15	0.47
DIR COR Post		9.02	5.58		
IND COR Pre	6	13.50	8.17	5.49	3.14*
IND COR Post		8.01	6.36		
ERR CON Pre	6	25.50	19.61	16.52	1.91
ERR CON Post		8.98	5.23		
DIR REL Pre	6	149.50	48.23	-49.51	-2.21+
DIR REL Post		199.01	37.33		
IND REL Pre	6	27.30	16.91	4.61	0.65
IND REL Post		22.69	15.86		

* $p < .05$

+ approaching $p < .05$

TABLE 11c

Differences between Pre and Posttreatment Adjusted Behavior

Mean Scores: Treatment Group 3

Behavior	N	Mean	S. D.	Differences of Means	t- Value
EST SET Pre	6	2.83	1.94	1.65	1.94
EST SET Post		1.18	1.36		
DIR COR Pre	6	6.83	7.78	-3.18	-1.47
DIR COR Post		10.01	6.43		
IND COR Pre	6	13.00	9.72	4.28	1.14
IND COR Post		8.72	5.53		
ERR CON Pre	6	32.00	27.60	15.20	1.37
ERR CON Post		16.80	14.29		
DIR REL Pre	6	158.33	29.77	-28.75	-1.60
DIR REL Post		187.09	30.23		
IND REL Pre	6	27.50	28.10	-4.21	-0.31
IND REL Post		31.71	24.21		

group there is also a nearly-significant ($p=.07$) increase in Directly Relevant teaching behaviors, accompanied by a statistically non-significant decrease in Indirectly Relevant teaching acts. Considerable increases in Directly Relevant teaching behaviors occur in all three treatment groups, a fact perhaps due to possible exchange of information among participants in the three treatment groups. It must be noted, however, that the direction of changes is by no means uniform for all behaviors across treatment groups. Thus, Treatment Group 2 shows the expected decrease and Treatment Group 3 the hoped for decrease in the Error/Confusion category, but in Treatment Group I, Error/Confusion increases rather sharply in the teaching of Unit II.

e. Training Effects on Pupil Achievement.

The analysis undertaken so far has shown that the relation between TTBE scores, teaching behaviors, and pupil achievements were in the expected direction, but that the significant relations between teaching behaviors and pupil achievements detected in the experiment were relatively scarce. Training effects on the TTBE and especially on behaviors, while also in the expected direction, were relatively unimpressive. In other words, the results of the analysis undertaken so far -- Relation of Black English Test and Teaching Behaviors to Pupil Achievement, and Workshop Effects, subsections c. and d. -- do not justify the expectation of a strong significant impact of training on pupil achievement.

In order to determine whether the training procedures of the workshop had a differential impact on pupil achievement, the mean

achievement scores for Unit II (Lessons 3 and 4) in teachers' classes were compared across the treatment groups.

The first comparison undertaken was an analysis of the variance of mean adjusted posttest scores for Lessons 3 and 4 and total Unit II by treatment groups. The analysis (summarized on Table 12) failed to show any significant difference due to treatment.

Since the analysis of variance was undertaken with relatively small numbers, it was decided to implement it with the use of a non-parametric procedure. The procedure used was the chi-square approximation of the Kruskal-Wallis test (Roscoe 1969, pp. 304-306). This test can be used to determine the significance of differences in rank orders. For the purpose of the Kruskal-Wallis test, the mean adjusted posttest scores of Lesson 3, Lesson 4, and Unit II achieved by the classes of the nineteen teachers were ranked from 19 to 1 (with the highest rank being assigned to the highest adjusted posttest means). The rankings for Lesson 3, Lesson 4, and total score of Unit II for each treatment group, and the chi-squares resulting from the calculation of differences between the treatment groups are shown on Tables 13a, 13b, 13c. None of the chi-squares reach the .05 level of significance. On Lesson 3 and the total score of Unit II, the general direction of differences in ranking seems to be in favor of the control group. In other words, the non-parametric analysis confirms the results of the analysis of variance which in turn were to be expected in light of the only relatively slight training effects and slight relations between training objectives and pupil achievements. Thus, there is no evidence that the training had any direct effect on pupil achievement.

TABLE 12

Analysis of Variance of Unit II Adjusted Posttest Scores
by Treatment Groups

Test	Treatment Group	Teacher No.	Mean	S. D.	D. F.	F-ratio	
Lesson 3	1	7	29.50	2.65	2.1	1.94	N.S.
	2	6	31.28	1.87			
	3	6	31.19	1.28			
Lesson 4	1	7	14.09	2.53	2.1	0.09	N.S.
	2	6	14.57	1.45			
	3	6	14.31	1.89			
Unit II (Total)	1	7	43.43	4.48	2.1	0.93	N.S.
	2	6	45.78	3.07			
	3	6	45.63	2.43			

TABLE 13a

Adjusted Mean Posttest Scores and Ranks by Treatment Groups: Lesson 3

TREATMENT GROUP I			TREATMENT GROUP II			TREATMENT GROUP III		
Teacher Number	Raw Score	Rank	Teacher Number	Raw Score	Rank	Teacher Number	Raw Score	Rank
30	29.46	4	35	30.52	9	31	32.16	17
32	25.09	1	38	35.02	19	36	28.65	3
33	30.53	10	39	30.19	6	41	31.49	14
34	30.59	11	40	31.28	12.5*	45	31.86	16
37	29.69	5	46	30.30	7	42	31.73	15
43	26.56	2	48	30.47	8	47	31.28	12.5*
44	32.81	<u>18</u>						
Rank Total		51			61.5			77.5
Mean Rank ¹		7.3			10.3			12.9

*tie ranks

¹Kruskal-Wallis Test χ^2 approximation: 3.25 N.S.

TABLE 13b

Adjusted Mean Posttest Scores and Ranks by Treatment Groups: Lesson 4

TREATMENT GROUP I			TREATMENT GROUP II			TREATMENT GROUP III		
Teacher Number	Mean Score	Rank	Teacher Number	Mean Score	Rank	Teacher Number	Mean Score	Rank
30	14.12	8	35	13.73	7	31	17.55	19
32	12.91	5	38	16.63	17	36	12.62	2
33	17.35	18	39	14.32	11	41	15.41	15
34	14.79	12	40	14.14	9	45	13.14	6
37	15.15	14	46	12.69	3	42	12.90	4
43	9.23	1	48	15.89	16	47	14.26	10
44	15.10	<u>13</u>						
Rank Total		71			63			56
Mean Rank ¹		10.1			10.5			9.3

¹Kruskal-Wallis Test χ^2 approximation: 0.14 N.S.

TABLE 13c

Adjusted Mean Posttest Scores and Ranks by Treatment Groups: Unit II

TREATMENT GROUP I			TREATMENT GROUP II			TREATMENT GROUP III		
Teacher Number	Raw Score	Rank	Teacher Number	Raw Score	Rank	Teacher Number	Raw Score	Rank
30	43.38	5	35	44.90	8	31	49.72	18
32	38.38	2	38	51.27	19	36	42.22	3
33	46.85	15	39	43.93	6	41	46.34	14
34	45.95	13	40	45.09	11	45	45.46	12
37	44.75	7	46	42.50	4	42	45.04	10
43	36.32	1	48	47.00	16	47	45.03	9
44	48.38	<u>17</u>			<u> </u>			<u> </u>
Rank Total		60			64			66
Mean Rank ¹		8.6			10.7			11

¹Kruskal-Wallis Test χ^2 approximation: 0.72 N.S.

Summary and Conclusions

The research reported in this monograph was moderately successful in accomplishing one of its purposes: it reconfirmed some results achieved in previous research. Our investigation furnished some evidence that directly task related behaviors and avoidance of confusing or erroneous behaviors are related to pupil achievement. The finding concerning the advantage of directly task related teaching behaviors confirms previous results of our research (Politzer and Lewis, 1978), as well as other research findings concerning the teaching of language arts and reading (Decker 1977). We also found that for at least two of the four lessons taught during this experiment, there was a positive relation between teachers' TTBE scores and pupil achievement. These findings also supplement and confirm our previous research (Politzer and Hoover, 1977; Politzer and Lewis, 1978) concerning the relation of TTBE scores to pupil achievement.

We had some success in changing teaching behaviors and teachers' knowledge through workshop intervention, but neither the relationship between teacher behaviors, TTBE knowledge, and pupil achievement nor the changes brought about by the workshops were of sufficient magnitude to bring about any measurable effect of workshop interventions on pupil achievement. We must conclude that more powerful interventions and/or more powerful predictors of pupil achievement would have to be used as treatment variables to demonstrate a direct effect on pupils' learning.

The results of our research also leave us with at least one unresolved problem. A great deal of research connects the reading problems of Black

children to Black English (e.g., see Harber and Bryan, 1976), and many different methods have been advocated for the solution of these reading problems (see Somervill, 1975). In our research, we have demonstrated positive relations between teachers' knowledge of Black English and pupils' achievement in language arts, but we were unable to show the link between teachers' knowledge and pupil achievement in terms of teaching behaviors. One might expect this link to lie in the use of Black English in the classroom or in greater acceptance of Black vernacular English on the part of the teacher (e.g., Piestrup, 1973). In the research conducted last year (Politzer and Lewis 1978), we found that, in fact, none of the teachers either used or specifically dealt with Black English in any precise way -- perhaps as the very result of being observed in an experiment specifically dealing with Black English in the classroom situation. At any rate, last year's findings resulted in not including any observation related to the use of Black English in the observation instrument used in this study. We should, therefore, like to conclude with two suggestions -- one very specific and the other quite general -- concerning two avenues of approach for further research in the use of Black English in the classroom: (1) the teaching performances studied in this report, especially the performances in lessons showing the positive correlations of TTBE knowledge and pupil achievement, should be reexamined in order to detect any possible Black English related classroom behaviors; and (2) especially if the re-examination of behaviors suggested in (1), above, should fail, further research in Black English related teaching behaviors should be carried out in research situations which do not focus teachers' attention on the role of vernacular Black English in the schools.

APPENDIX A

Definitions and Examples of Teaching Behaviors

Establish Set

The set is established when the teacher tells the class the purpose or gives an overview of the lesson

Examples

- T: Today we're going to learn about when to use not, none, nothing, to say "no" in a sentence.
- T: Today, children, we are going to do some work on negatives. Don't be concerned if you don't understand what that word means. I'm going to explain it to you in a minute.
- T: Today we are going to learn how to use negatives or words that mean "no."

Direct Correct

This behavior category indicates directly that a student's response is incorrect. This category includes giving a terse correction, calling on another student to give the correct answer and accompanying the correction with a longer explanation.

Examples

- T: Read the next one, dear.
- S: I have not, huh, candy.

T: Read that again, sweetheart.

S: I haven't no candy.

T: No. Read it again, dear.

S: I have no candy.

T: Be careful you said "no" twice. You said "no" twice, Minnie. You said "haven't no" and that says "no" twice. 'Cause, "haven't" means "have not" and "not" is another way of saying "no."

Indirect Correct

This category refers to corrections made indirectly. The teacher attempts to draw out the correct answer by giving further examples, by questioning, through induction, etc.

Examples

T: She _____ wants to eat her carrots.

S: Isn't.

T: Okay. You say isn't, Mark? Let's try "isn't" here to see if it really fits. She isn't wants to eat her carrots.

T: What is a verb?

S: A verb is the name of a person place or thing.

T: Then, what is a noun?

Error/Confusion

Verbally or visually communicating incorrect information or information which is, if not incorrect, confusing characterizes this category. It was quickly determined that while few outright errors occurred in the

teaching behaviors, a type of communication did occur which caused pupil error, misunderstanding, or confusion. Such confusing behaviors often took the form of unclear communications such as the recitation of a rule without showing its relationship to the lesson at hand.

Examples

- T: In the sentence 'John walks home,' the verb is 'walks.' The root of 'walks' is 'walk.' The -s is the present tense marker.
- T: Kyle, I want you to come up and just stand here by this book. Class, what is Kyle doing?
- S: Standing by the book.
- T: O.K., but what is he not doing?
- T: Negation is... What's the opposite of positive, Roger? Negation is like a negative point, but it's not really negative as we'll soon see.

Directly Relevant

This category refers to teaching activity that is focused directly on the concepts of the lesson being taught, and which is the teaching behavior that has direct relevance to the lesson.

Examples

- T: Who can tell me what a negative is?
- S: A negative is a word that means no.
- T: Jack, give me a sentence using a negative
- S: I don't like coffee.
- T: What's another way of saying that sentence?

S: She doesn't have any.

T: She doesn't have any. That's right. Because "doesn't" has a "not" in it. That's a "no" word. You can't have more than one "no" word in a sentence.

Indirectly Relevant

This category refers to teaching activity that is not focused directly on the concepts of the lesson being taught; this includes activities off the main lesson, related activities or offshoot conversations that are ancillary.

Examples

(Lessons on negation)

T: What about "can't?" What is "can't?"

S: A contraction.

T: A contraction. Very good. Most of the words that we're gonna be working with are contractions. And I want you to tell me if you know what the contraction is for "will" in the negative way.

T: What am I? What has no feet, no legs but can run?

S: A bird?

T: No.

S: Fish:

T: Look around this room someplace that has ...

S: A snail?

T: No. Look on the wall.

APPENDIX B

Sample of Pupil Achievement Test (Posttest: Unit II, Lessons 3 and 4)

NAME _____
 GRADE _____ ROOM _____
 TEACHER _____
 SCHOOL _____

SECTION I

Digraphs

- I. Write the words that your teacher reads to you and put them in the blank spaces below.

EXAMPLE: _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

- II. Your teacher will tell you how to do this section.

EXAMPLE WORD LIST A: flies brief wealth seat

EXAMPLE WORD LIST B: thread brief heat dead

- | | | | | | | |
|-----|--------------|-------|--------|-------|--------|--------|
| 9. | WORD LIST C: | break | niece | flies | lied | reach |
| 10. | WORD LIST D: | dried | shield | lies | brief | piece |
| 11. | WORD LIST E: | deal | bread | pies | death | steal |
| 12. | WORD LIST F: | peas | thread | teach | fries | breath |
| 13. | WORD LIST G: | tries | reach | thief | health | leaf |

PLEASE TURN TO THE NEXT PAGE

III. Read over this section and fill in the blank spaces with a word that you think belongs there.

EXAMPLE: When it's cold, you have to turn up the h.

14. We e supper every day at six o'clock.
15. Last night I r two books.
16. You use your eyes to see and your ears to h.
17. Will you t me how to jump rope?
18. My mother baked an apple p.
19. There is lots of sand at the b.
20. I like f chicken best of all.
21. It's nice to say thank you and p.
22. Hamburger is my favorite m.

SECTION II

I. Circle the verbs in the following five sentences. Then, if the verb is in the past tense, write PAST above it. If the verb is in the present tense, write PRESENT above it. Do this for all the verbs in this section.

EXAMPLE: I see the airplane.

23. Mary talked on the phone for three hours.
24. Susie likes peanuts.
25. Lions hunt for their food everyday.
26. Sam ate all of the cookies.

PLEASE TURN TO THE NEXT PAGE

II. Read the two sentences for each question then checkmark [✓] the sentence that sounds best to you.

EXAMPLE

We come here two years ago. (a) _____
We came here two years ago. (b) _____

27. I talk to Jack last night. (c) _____
I talked to Jack last night. (d) _____
28. He acts nice when his brother is with him. (e) _____
He acted nice when his brother is with him. (f) _____
29. Sue plays with us when she can. (g) _____
Sue played with us when she can. (h) _____
30. They come here last year. (i) _____
They came here last year. (j) _____
31. Sara laughed when she had to help me. (k) _____
Sara laughed when she has to help me. (l) _____

III. Here is a list of verbs. Some of these verbs are in the present tense and some are in the past tense.

VERB LIST

Look at the story below. This story has some blank spaces with verbs from the PRESENT TENSE. You need to fill in the blank spaces with verbs from the PRESENT TENSE. Choose PRESENT TENSE VERBS from your verb list to complete this story.

is are
was am
were did
do does
has have
had

PRESENT TENSE STORY

Barbara 32 a lucky girl. She 33 a nice bike.
Jimmy and Sandy 34 new bikes too. They 35 very happy.

PLEASE TURN TO THE NEXT PAGE

Here is a list of verbs. Some of these verbs are in the present tense and some are in the past tense.

VERB LIST

Look at the story below. This story has some blank spaces in it. You need to fill in the blank spaces with verbs from the PAST TENSE. Choose PAST TENSE VERBS from your verb list to complete this story.

is are
was am
were did
does do
has had
have

Yesterday, I 36 a good thing. I 37 lots
homework, and I 38 all of it right. My mother and
father 39 so happy. My teacher 40 happy too.

END OF TEST

APPENDIX C

Description of Workshop Treatments

Treatment Group I: Black English

The Black English workshop was based on previous work done by the staff of the Program on Teaching and Linguistic Pluralism (Ford et al., 1976; Lewis and Hoover, 1977). The focus of the workshop was on the content of the Teacher Test of Black English (TTBE) and the relationship between language arts achievement and knowledge about Black English.

The workshop leader went over those items of the TTBE which were missed by most teachers who took the test. The correct answers were given, and theoretical and practical aspects of the items were explained. The workshop leader established some concepts concerning Black English, especially that the term "Black English" is generic and includes several speech varieties, including Vernacular Black English (VBE), and Standard Black English (SBE). Vernacular Black English was described as containing systematic syntactical and phonological features which differ in variation from those of standard English. Standard Black English was described as a variety of standard English with certain phonological features, especially intonations, which identify the speaker as Black.

The workshop leader pointed out that historically, VBE is an outcome of the social interaction of African slaves and British colonials in the New World around the seventeenth century. Thus, the various influences of West African languages, early English, and other European languages were the primary sources of present-day Vernacular Black English.

The grammatical and phonological features of Vernacular Black English

were presented along with a discussion of how each of these might apply to specific uses of words, meanings, and structures. Some information was also provided on the meaning and use of certain Black speech events, such as "capping" and "marking," along with sociolinguistic information about how, when and why these might be used.

The workshop contained information on the relationship of Black English to classroom performance in reading and other language arts skills. The workshop leader led a discussion of attitudes toward second-language or second-dialect learners; she stressed that second languages are usually processed through the speaker's first language or dialect and that a person's description of an "accent" usually is based on how that accent is perceived by the hearer. The workshop leader pointed out that all languages and all dialects are systematic and logical, and that people speaking any dialect or language are, therefore, linguistically capable of expressing any idea or concept.

The concluding portion of the workshop concerned common characteristics of school where low income, predominantly VBE speaking children are excelling in language arts and other subjects. Surveys of successful schools (Weber, 1970; Hoover, 1978) show that in most cases, schools where predominantly Black and/or other low income students are achieving have firm administrators, structured classrooms, teachers with high pupil expectations, and reading programs which use phonics either exclusively or in conjunction with other kinds of reading instruction. The workshop leader emphasized that VBE in and of itself does not prevent children from achieving in reading and other school subjects.

Teacher participants expressed a great deal of interest and curiosity

in the subject of Black English and in the ways it might relate to teaching language arts to VBE speaking children. They requested additional information and further workshops on the subject.

Treatment Group II: Teaching Behaviors

In the teaching behaviors treatment group, the workshop leader concentrated on helping teachers to be able to recognize and produce those teaching behaviors which had been previously found to be related to pupil achievement (Politzer and Lewis, 1978). She described these behaviors to the teachers and gave them written scripts taken from previous lessons containing these behaviors. Teachers read over these scripts in groups. They practiced identifying the various behaviors and discussed ways in which they might be applied to their own teaching activities.

Among the identified teaching behaviors, the Error/Confusion category was the source of much discussion. The workshop leader pointed out the nature of the most so-called errors: For example, a teacher might explain a part of the lesson in confusing terms or by using a mixture of examples which were potentially conflicting. (See Appendix B).

The teachers spent a great deal of time and energy on this category and asked numerous questions about ways to reduce confusions. To help teachers work on recognition of the Error/Confusion and other behaviors, the workshop leader provided teachers with activities which were directly related to specific lessons' objectives. Illustrative lists and charts were given to the teachers to help them to increase their use of the positive teaching behaviors and to reduce the number of negative ones.

For example, in the case of the present tense and past tense verb

usages, the workshop leader pointed out to the teachers that the "right now" example which is commonly applied to Explanation of the Present Tense actually applied to the present progressive tense. Therefore, teachers who explain the present tense by saying such things as, "Right now, I am talking;" "What are you doing right now;" and "You are sitting in your chair," and then carry out the lesson with examples from the simple present tense, such as, "I talk," "You sit," etc., are confusing two grammatical structures and two concepts.

Several charts were given to the teachers with information concerning the construction of the past tense (Politzer and Politzer, 1972). The workshop leader and teachers discussed major forms of the English verbs, rules for constructing the regular past tense including accounting for the different "sounds" (endings) of the past tense, and classifications of main and auxiliary verbs. This information was used to help teachers to organize correctly their selection and classification of the past tense of verbs.

Discussion for the teaching of digraphs followed a pattern similar to the one on verbs. Reference sheets and charts (Venezky, 1970; Mason, 1977) provided the teachers with an organization and understanding of various kinds of digraphs.

The workshop leader presented information concerning predictability of certain vowel sounds in certain contexts and demonstrated this through the concept of major pattern words, minor pattern words, and exceptions. This concept holds that since any vowel or combination of vowels is likely to have several different sounds, teachers should teach the most frequently occurring (major pattern) sound for a given vowel first. The second most

frequently occurring sound -- minor pattern(s) -- should be taught next and other sounds should be taught as exceptions. The teachers looked over lists of words containing digraphs and practiced arranging them in sound sets and in identifying major and minor patterns and exceptions.

Teachers in this treatment group were asked to teach their next set of lessons by increasing those behaviors identified as positive and decreasing those identified as negative. They were also asked to use the information contained on the charts and lists in their presentations in order to help them avoid errors and confusing statements.

Teachers expressed interest in the information on organizing their lessons according to sound or function classifications and stated that they were specially interested in obtaining more information about teaching grammar.

Treatment III: Cognitive Learning Styles

"Cognitive Learning Styles" was selected as the topic for this treatment group which was considered a control group. The main purpose of this workshop was to provide teachers with some information which would be interesting or beneficial to them and, at the same time, not likely to result in a drastic change of teaching behavior.

The workshop leader explained that the concept of cognitive styles leads to the denial of the existence of one universally acceptable and best style of teaching or learning intellectual tasks. Individuals or groups of individuals may differ in their approach to learning while possessing the same degree of intellectual potential.

The workshop leader explained that cognitive style is a function of

various socialization practices which in turn depend on cultural values. Sometimes, family or community cultural styles differ quite radically from the learning styles of the classroom or school community. Teachers and others who are unaware of these differences may obtain more positive results with pupils who match their own cognitive style and negative results with pupils whose cultural style is different from their own. These teachers might obtain better results with all of their children by becoming aware of the culturally different cognitive styles and by trying to develop a multicultural teaching style.

The workshop leader utilized a diagram (based on Ramírez and Castañeda, 1974) which illustrated how cultural values lead to socialization practice and how these, in turn, are expressed in styles of learning, motivation, human relations, and communication. The workshop leader described the field-sensitive and field-independent pattern styles which can develop from differences in cultural values. The field-independent style is essentially ego-centered, competitive, and part-oriented; and the field-sensitive style is essentially group-centered, collective, and whole-oriented.

The workshop leader passed out field-independent/field-sensitive rating sheets for teachers to complete. One sheet enabled teachers to rate their own teaching style as primarily field-sensitive or field-independent, and the other rating sheet enabled teachers to rate one of their pupils for these same characteristics.

This activity generated a great deal of discussion among the teachers. Many teachers' personal ratings differed from those which they did on their students. Teachers expressed interest in learning more about cognitive style assessment.

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